## REMARKS

In the Advisory Action of October 5, 2005, the Examiner reiterated his position expressed during telephonic interview with the Examiner on August 25, 2005, and in the Final Office Action that the claim language claiming a perforated tubular chamber was not explicit enough to differentiate from Sneed's (U.S. Patent No. 4,128,393) windshield, as Sneed also teaches a shield with a protected zone. In the interview, the Examiner stated that phrasing in claim 1, "windshield provides a protected zone against high velocity air infusion for both the pilot flame and for the thermocouple and against high air flow is a partially perforated tubular chamber that is intersectingly engaged with the mounting bracket" was not explicit enough to differentiate from Sneed's (U.S. Patent No. 4,128,393) windshield, as Sneed also teaches a shield with a protected zone. The Examiner argued that claim 1 could be interpreted to include a shield as taught by Sneed, which is shell-like in shape.

Applicant argued that the language and drawings as taught in the specification define the Applicant's windshield. As taught, Applicant's windshield is sufficient in size to surround the pilot light, the thermocouple and the burner, and does not merely provide protection on one side like Sneed's shield, but all sides. In addition, Applicant's windshield does not have a canopy, as taught by Sneed. On page 7, line 18, the specification describes the windshield as an "open ended chamber." Figure 3 clearly shows a substantially tubular chamber having open ends.

Examiner consented that if claim 1 was amended so that one could not construe that Applicant's claimed windshield as broad enough to encompass Sneed's shield (5), then claim 1 would be allowed. Substantially, agreement was reached that if claim 1 were amended to claim a windshield having side walls that were surrounding, and that the windshield has open ends, then this would be sufficient to differentiate Applicant over Sneed, retaining the limitation that the windshield is perforated.

To that end the Applicant has amended claim 1, eliminating any reference to "tubular" as that word remains inexorably ambiguous, and entered alternative phrasing.

Applicant believes the following description of the windshield leaves no doubt as to its construction. The windshield is a partially perforated chamber having an open top and an open bottom, and at least one surrounding side wall, wherein the at least one surrounding side wall has a section that is partially perforated and a section that is solid.

The specification has been amended to support this alternate phrasing. The Amendment should place claim 1 in condition for allowance. Claim 20 is also amended to include this language. Claims 2 and 29 have been amended to correct typographical errors. Claim 23 is amended deleting the reference to "tubular".

## Rejections before the Interview

Claims 1-31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,919,084 to Maurice ("Maurice '084") in view of U.S. Patent No. 4,128,393 to Sneed ("Sneed"). Sneed teaches a gas burner (3) and thermocouple (2) protected from air-flow by a perforated shield (5) having a shell-like shape. The shield forms an air protected zone within its confines. The Examiner asserts it would be obvious to modify the burner assembly of Maurice '084 to incorporate the windshield of Sneed.

Examiner admits that Maurice '084 does not teach a windshield, and the Examiner admits that Sneed teaches a perforated shield (5) having a shell-like shape. Applicant's windshield has an open to and open bottom and is a partially perforated chamber that provides protection from the wind from all sides. The side wall(s) forming the chamber provide a shield from side winds. Sneed's shell-like perforated shield will only provide a protected zone on the leeward side of the shield (5) to the flame (7). The thermocouple (2) is not protected against crosswinds (see Fig. 1). Sneed teaches in col. 3, lines 3-5, that "shield 5 is adopted to enclose the space about the flame 7 at the 'back' (i.e., the side of nozzle 3 facing the source of wind gusts or drafts), to the side, and above the flame in a canopy fashion." Applicant's windshield does not have a

canopy. A canopy would prevent Applicant's burner flame from impinging the ceramic element (44) of burner 100, as shown in Fig. 1. The Sneed windshield would not work with "Maurice '084" for a similar reason. Note that Sneed does not mention protecting the thermocouple, and has to orient the shield so that it faces the wind. Applicant's windshield provides a surrounding chamber with open ends that protects the thermocouple (22) and pilot light flame (56) from **crosswinds**, and/or winds from any side of the windshield. The thermocouple (22) and pilot light flame (56) are enclosed within the chamber. No orientation or alignment is required.

• •

It is unclear how a Sneed shell-like shape windshield with a canopy could be combined with Maurice '084's ignition assembly (48, 20, 24, and 26), and Maurice '084's ceramic radiant element 110, as the shell-shaped shield would be on its side and would provide no wind protection. Alternatively, the shell-shaped shield would be orthogonal to the ignition system and, likewise, would provide no wind protection and the flame would not impinge the ceramic radiant element 110. Applicant's invented windshield, vertically mounted, would appear to block Maurice '084's deflector 48, and positioning, as shown, would necessitate that it slide over the gas line (14) and electrical leads (56). Applicant's invention is not obvious in light of Maurice '084 in view of Sneed. The rejections are respectfully overcome, and should be withdrawn.

Fees for the RCE are enclosed. No fees are required for an extension of time or

## Conclusion

Applicants would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Representative at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Representative at Examiner's earliest convenience.

Respectfully submitted,

F. Rhett Brockington

Patent Agent for Applicant(s)

J.R 18 mit

Registration No. 29,618

## **DOUGHERTY CLEMENTS**

1901 Roxborough Road, Suite 300 Charlotte, North Carolina 28211 USA

Telephone: 704.366.6642 Facsimile: 704.366.9744

\* - \* 1 - 4 \* 1 - 6

rbrockington@worldpatents.com